ENVIRONMENTAL CONSIDERATIONS IN POST-CONFLICT MILITARY OPERATIONS AND RECONSTRUCTION

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Joint Staff-OSD Sponsored Workshop: Environmental Considerations in Military Operations and Global Basing

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Work in progress–Do not cite or distribute

Outline

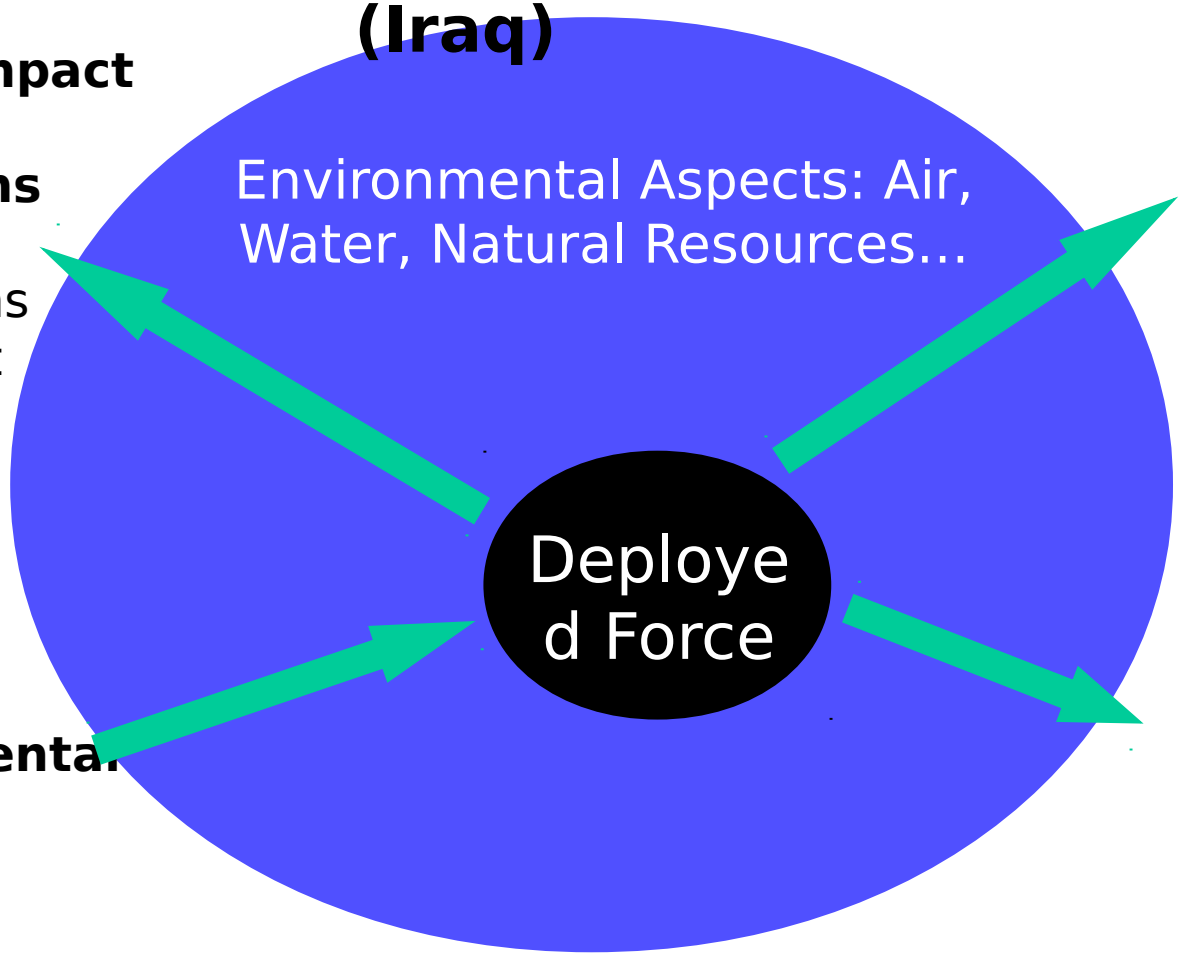
- Background
- Context for Contingency Operations
  - Policy and Legal Context
  - Operational Context
- Experience in Contingency Operations
  - Case Studies
  - Insights
- Preliminary Findings and Recommendations

Research Objectives

- Help the Army assess whether existing policies adequately address environmental activities in
  - Post-conflict military operations and reconstruction
- Base the analysis on
  - Existing and emerging national, DoD, and Army policies and doctrine
  - Recent conflict and post-conflict operations

Goal: Tighter, more effective ESOH doctrine and training that helps the Army meet military and national objectives

Scope of the Problem



Army's Impact from Operations
- Combat operations
- Footprint

Securing Environmental Resources
- Dams
- Oil wells
- Water supplies

Environmental Effects on Army
- Disease
- Climate
- Exposure

Army's Impact from Environmental Actions
- Stability operations
- Environmental management

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Why Should the Army Care About the Environment in Contingencies?

- Affects things of concern to commanders
  - Soldier health
  - Tactical outcomes
  - Operational effectiveness (reduce logistics tail, signatures)
  - Post-conflict operations
  - Army often gets stuck dealing with it (quick exit is rare)
  - Do the right thing (Army ethos)

- Affects things of concern to high-level policymakers
  - National goals for operation, including post-conflict
    - Political, economic, military
  - Army and U.S. liabilities
    - Soldiers, cleanup of host nation
  - Cost of operations
  - Diplomatic relations

Methodology

- Review of existing environmental doctrines, policies, and laws
  - DoD and Army for post-conflict contingency operations
  - National and international laws
- Analysis of operational experience
  - Field and journal literature review
  - Over 50 in-depth interviews of diverse experienced personnel
  - Development of 110 case study database
  - Assessed trends and developed insights
- Identified gaps between operational experience and policies and doctrines
- Developed recommendations for addressing gaps

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Policy and Legal Context

- DoD and Army policies, regulations, and doctrine
  - Few address environmental issues in contingency operations (FM 3-100.4, Annex L)
  - No top cover: Army regulation or DoD instruction
  - Focus is narrow
    - Do not focus on planning and operations for post-conflict phase, peacekeeping or nation building
    - Weak on planning, policies, and procedures for partners and contractors

- Legal context
  - Domestic laws have little or no applicability in overseas operations (exception: Foreign Claims Act)
  - International law has little effect during warfare, can affect post-conflict (exception: Basel Convention)

Operational Context

- Army context
  - Army often involved in post-conflict operations for much longer than it plans
  - Army success in post-conflict role can affect success of overall mission
  - Environmental considerations very different than for installations
  - Need to start reconstruction before conflict completely over
    - Different than World War II model

- Other stakeholders
  - Must oversee contractors
  - Collaborate with other U.S. and international agencies, NGOs
  - Work with local authorities, community leaders

Local Context: Often Severe Environmental Problems

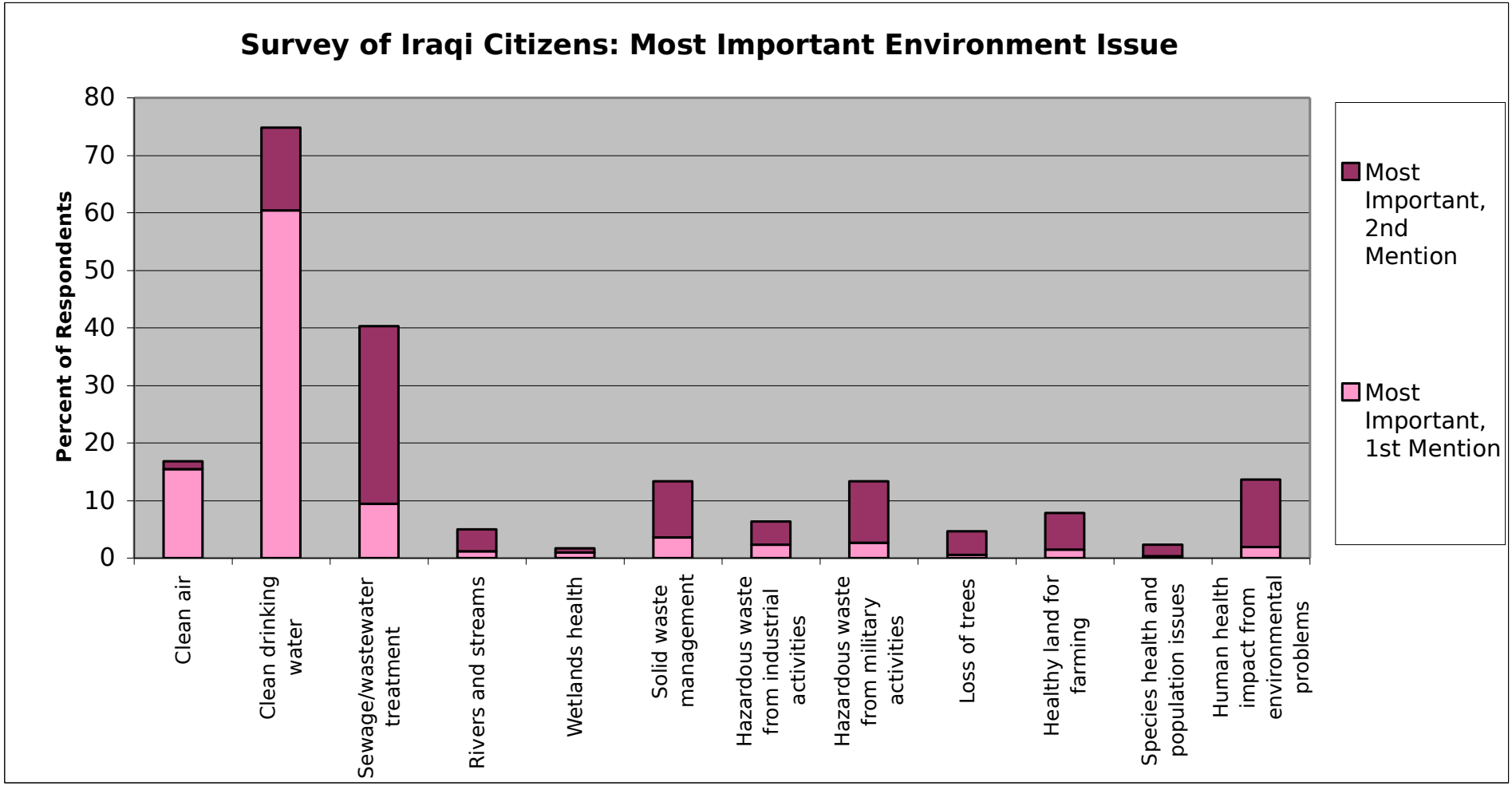
- Environmental risks are higher
  - Increased health risks/force protection issues for US troops
  - Environmental effects of U.S. operations, conflict operations or reconstruction can be accentuated
- Environmental issues more likely to impact mission
  - Basic environmental conditions can be significant concern to local population
    - » Life-sustaining infrastructure (water, sewage, agriculture)
    - » Evidence from Iraq
  - Environmental problems may contribute to instability and conflict

Public Opinion Surveys of Iraqis': Importance of Infrastructure

- Rebuilding infrastructure (electricity, water supply, etc.) ranked 1st or 2nd for Iraqis after security issues
  - Results consistent in every major opinion survey (Fall 2003 through February 2005)
  - Exception: Tikrit/Baquba ranked infrastructure highest (51%) with the next highest concern being security (22%)
    - » Department of State regional poll taken in Dec. 2004

- Clean water mentioned second after electricity, when asked which infrastructure issues were most important
  - Ensuring electricity for all: 86%
  - Ensuring clean water for all: 64%
  - Sewage and trash also important
    - » Oxford Research International survey March 2004, 1st, 2nd or 3rd response

RAND Public Opinion Survey of Iraqis' about Environmental Issues



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Case Study Analysis

- Over 110 case studies of contingency operations activities with environmental component
  - Iraq, Afghanistan, and Balkans majority of cases
  - About 60% during post-conflict phase
    - About 20% are reconstruction projects
    - Over 1/3 could affect reconstruction
  - Many involve legacy environmental problems
- Examined actual and potential impact from these activities in eight key dimensions
  - Affects the health of U.S. troops or others
  - Affects the military mission
  - Causes additional environmental harm
  - Incurs financial cost or savings to the Army
  - Affects community or diplomatic relations
  - Affects the safety of U.S. troops
  - Incurs environmental liability
  - Affects reconstruction activities

Environmental Case Study Examples

- Improper disposal of hazardous waste at Soviet-era base
- Soldiers attempt improper waste disposal
- Siting US airfield operations over leaking fuel tank site
- US forces occupy former Soviet Union base with leaking electrical transformers
- Soldiers develop respiratory illness after occupying former Soviet structure
- U.S. soldiers living with asbestos
- Hardpan soil disturbance creates safety and health issues for soldiers
- Field expedient satellite accumulation points (SAP) pose environmental and safety risks
- U.S. Army Colonel agrees to clean-up host nation landfill
- Lack of contractor oversight results in improper dumping of hazardous wastes
- Non-native insects returning to U.S. base in crates
- Rear detachment personnel unprepared to comply with US environmental requirements
- U.S. soldiers taking souvenir bricks out of temple
- Looting of Iraq Museum
- Iraq monument avoided in coalition forces attacks
- Assessing local water, wastewater, and solid waste systems
- Repaired city main water supply
- Dust control in runway repair
- Instituting garbage-collection service for city neighborhoods
- Fixing water treatment plant for local and base populations
- Well repair for base camp
- Army engineers develop model to support water management and help to restore wetlands
- Insufficient mosquito control at base camp

Analysis of Operational Experience: Insights

- Environmental considerations have a broad range of far-reaching impacts
  - Across many dimensions and organizations
  - In many geographic areas
- The Army is involved in a range of reconstruction activities with environmental components
  - Projects to help local communities
  - More strategic projects addressing wider area or longer-term
- Insufficient resources are available to fully address environmental issues
  - Shortages of manpower, training and funding
  - Lack of awareness and consideration for environmental issues
- Contractors must be carefully selected and managed

Analysis of Operational Experience: Insights (continued)

- Collaboration with stakeholders is beneficial and critical
- Pro-active environmental practices and lessons are not being transferred to other parts of the Army
  - Innovative field environmental practices and approaches
  - Industry environmental technologies that need adaptation to the field
- Country-specific conditions and needs should be considered
- Short- and long-term considerations need to be balanced
  - Procedures for temporary vs. permanent base camps
  - In reconstruction projects and for sustainability
- Environmental problems may contribute to insurgency problems

Environmental Problems May Contribute to Insurgency

- Major General Chiarelli interviews with the *Wall Street Journal* and *New York Times*, June 2004
  - First Cavalry Division in Iraq from Fall 2003-Feb 2005
  - His intelligence officers have determined that the insurgency is strongest in areas with little or no sewer service, faltering electricity and high unemployment
  - Addressing sewer, trash, drinking water, and electricity issues important for “fence sitters” who have not yet decided whether to support the new government or the insurgency
  - Where services restored, insurgent attacks fell sharply

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Findings

- Environmental considerations
  - Can have a significant impact on military operations
  - Can be particularly important for success in the post-conflict phase
  - Are significantly different in contingency operations than in U.S. operations
- Environmental issues can have far-reaching impacts
  - For the mission, region and the Army
  - Geographically

Findings (continued)

- Inadequate environmental practices in contingency operations can increase risks and costs
- The Army could
  - Improve its understanding of environmental considerations
  - Better incorporate them into plans and operations
- The Army has no comprehensive approach to environmental considerations in contingencies
  - Especially in the post-conflict phase

Recommendations

- Improve the policy and guidance for environmental considerations in contingency operations
- Encourage an environmental ethic throughout the Army that extends to contingency operations
- Better incorporate environmental considerations into planning particularly for the post-conflict
- Improve pre-deployment and field environmental training
- Invest more in environmental resources and good environmental practices for field operations
- Use “sustainability” model for contingency operations